STND-20081110A

STATEWIDE INFORMATION SECURITY STANDARD

Information Security Configuration Management

Draft

Office of the Chief Information Officer

Department of Administration Information Technology Services Division PO Box 200113 Helena, MT 59620-0113

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DEPARTMENT OF ADMINISTRATION

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DRAFT STATEWIDE STANDARD: INFORMATION SECURITY CONFIGURATION

MANAGEMENT

EFFECTIVE DATE: MARCH 1, 2011 APPROVED: <DATE APPROVED>

I. Purpose

This Information Security Configuration Management Standard (Standard) establishes the specifications and process requirements to implement the Statewide Policy: Computer Security Configuration Management (Policy) for computer and information systems security.

II. Authority

The State of Montana Chief Information Officer is responsible for developing policies, standards, and guidelines for addressing information security for agency operations and assets. This Standard is consistent with the requirements of the Montana Information Technology Act for securing information technology and §2-15-114 MCA. Security responsibilities of departments for data.

The Office of the Chief Information Officer of the State of Montana has developed this instrument to further the statutory responsibilities under §2-17-534 MCA. Security responsibilities of department, as delegated by the Director, Department of Administration.

III. Applicability

This Standard is applicable to parties subject to the **Statewide Policy: Information Security Configuration Management**.

IV. Scope

This Standard specifies and requires the implementation of information security configuration management controls for the information systems and assets managed or controlled by agencies.

This Standard encompasses information systems for which agencies have administrative responsibility, including systems managed or hosted by third-parties on agencies' behalf.

This Standard may conflict with other information systems policies currently in effect. Where conflicts exist, the more restrictive standard governs. Future policies or standards will specifically identify and retire any superseded portions of current policies or standards.

STATEWIDE STANDARD: CONFIGURATION MANAGEMENT PAGE 2

V. Definitions

Agency Any entity of the executive branch, including the university system. Reference

§2-17-506(8), MCA.

Information The protection of information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to

access, use, disclosure, disruption, modification, or destruction in order to provide confidentiality, integrity, and availability. Reference 44 U.S.C., Sec.

3542.

Information A discrete set of information resources organized for the collection, processing,

System maintenance, use, sharing, dissemination, or disposition of information.

Reference 44 U.S.C. Sec. 3502.

Information Information and related resources, such as personnel, equipment, funds, and

Resources information technology. Reference 44 U.S.C. Sec. 3502.

Information Hardware, software, and associated services and infrastructure used to store or

Technology transmit information in any form, including voice, video, and electronic data.

Reference §2-17-506(7), MCA.

Refer to the <u>National Information Assurance (IA) Glossary</u>, at http://www.cnss.gov/Assets/pdf/cnssi_4009.pdf for common information assurance definitions.

Refer to the <u>Statewide Information System Policies and Standards Glossary</u> for a list of local definitions.

VI. Requirements and Specifications

In compliance with the **Statewide Policy: Information Security Configuration Management**, the requirements and specifications for this Standard are derived and adopted from the <u>National Institute of Standards and Technology Special Publication 800-53 (NIST SP800-53)</u>

Recommended Security Controls for Federal Information Systems and Organizations (NIST SP800-53), <u>Federal Information Processing Standard</u> publications (FIPS PUB), and other <u>NIST publications</u> as specifically referenced herein.

A. Management Requirements

Each agency shall ensure that an organization structure is in place to:

- 1. Assign information security responsibilities.
- 2. Perform configuration management for information systems.
- 3. Allocate adequate resources to implement configuration management controls.
- 4. Establish and evaluate performance measures to assess implementation of this Standard and subordinate procedures.
- 5. Develop process(es) and procedure(s) to measure compliance with this Standard.

1. Agency Heads

The agency head (or equivalent executive officer) has overall responsibility for providing adequate resources to support the information system security configuration management within their organizations.

2. Information Security Officer

The Information Security Officer (also known as the Information Systems Security Officer) may be the same individual designated by the agency head to administer the agency's security program for data under MCA 2-15-114. Security Responsibilities Of Departments For Data. Specific responsibilities under this Standard are:

- 1. Evaluate configuration management issues within the agency and all component organizations.
- 2. Provide resolution recommendations to the agency head, attached agencies and division administrators, if any.
- 3. Develop agency policies, standards, and procedures as required.

VII. Performance Requirements

Each agency shall develop and implement configuration management security controls based on an evaluation of information systems using the NIST *risk management framework* that:

- 1. Uses the categorization standards of:
 - a. Federal Information Processing Standards Publication (FIPS PUB) 200
 Minimum Security Requirements for Federal Information and Information Systems
 - Federal Information Processing Standards Publication (FIPS PUB) 199
 Standards for Security Categorization of Federal Information and Information Systems
- Is in compliance to, and integrated with guidance provided by the <u>NIST SP800-60</u>, <u>Guide for Mapping Types of Information and Information Systems to Security Categories</u>.
- 3. Implements specified levels of configuration management standards and controls, based upon the following requirements:
 - a. As determined by completion of the risk management process specified in and based upon <u>NIST SP800-39 Managing Risk from Information Systems An Organizational Perspective</u>. The results of the risk assessment shall determine any changes in the level of process, standards and controls.

Or,

b. Implement the lowest level of configuration management standards and controls based upon <u>NIST SP800-53 Recommended Security Controls for</u>

STATEWIDE STANDARD: CONFIGURATION MANAGEMENT PAGE 4

Federal Information Systems, Annex 1, Low-Impact Baseline Configuration Management (CM) family (Annex 1) not later than March 1, 2011; and

- 4. Implements this Standard through procedure(s).
- 5. Reviews configuration management controls and process and procedure(s) annually, and implement authorized changes to policy, standard(s), or procedure(s).
- 6. Is based upon the latest publicly available versions of publications referenced within this Standard *at the date of approval* of this Standard. (Note: Because newer versions of the publications referenced herein become available from time-to-time, agencies are encouraged to stay current by using the most recent versions, as deemed feasible by each agency. Future revisions of this Standard shall reference then currently-available versions.)

I. Compliance

Compliance with this Standard shall be evidenced by adherence to the requirements specified above, as described in the referenced publications.

VIII. Standard Changes and Exceptions

Standard changes or exceptions are governed by the <u>Procedure for Establishing and Implementing Statewide Information Technology Policies and Standards</u>. Requests for a review or change to this instrument are made by submitting an <u>Action Request form</u> (at http://itsd.mt.gov/content/policy/policies/Administration/action_request.doc). Requests for exceptions are made by submitting an <u>Exception Request form</u> (at http://itsd.mt.gov/content/policy/policies/Administration/exception_request.doc). Changes to policies and standards will be prioritized and acted upon based on impact and need.

IX. Closing

Direct questions or comments about this instrument to the State of Montana Chief Information Officer at ITSD Service Desk (at http://servicedesk.mt.gov/ess.do), or:

PO Box 200113 Helena, MT 59620-0113 (406) 444-2700

FAX: (406) 444-2701

X. References

A. Legislation

- <u>2-15-114 MCA</u> Security Responsibilities of Departments for Data.
- <u>2-17-534 MCA</u> Security Responsibilities of Department.

B. Policies, Directives, Regulations, Rules, Procedures, Memoranda

- MOM 3-0130 Discipline
- <u>Statewide Policy: Establishing and Implementing Statewide Information Technology</u> Policies and Standards
- Statewide Procedure: Establishing and Implementing Statewide Information Technology Policies and Standards

C. Standards, Guidelines

- Guide To NIST Information Security Documents
- NIST SP800-53 Recommended Security Controls for Federal Information Systems
- NIST SP800-53 Recommended Security Controls for Federal Information Systems, Annex 1, Low-Impact Baseline Configuration Management (CM) family
- NIST SP800-53 Recommended Security Controls for Federal Information Systems, Annex 2, Moderate-Impact Baseline Configuration Management (CM) family
- NIST SP800-53 Recommended Security Controls for Federal Information Systems, Annex 3, High-Impact Baseline Configuration Management (CM) family
- NIST SP800-39 Managing Risk from Information Systems An Organizational Perspective
- FIPS PUB 199 Standards for Security Categorization of Federal Information and Information Systems
- FIPS PUB 200 Minimum Security Requirements for Federal Information and Information Systems
- NIST SP800-60, Latest Revision, Guide for Mapping Types of Information and Information Systems to Security Categories

STATEWIDE STANDARD: CONFIGURATION MANAGEMENT PAGE 6

XI. Administrative Use

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Change & Review ITSD Service Desk (at http://servicedesk.mt.gov/ess.do)

Contact:

Review: Event Review: Any event affecting this instrument may

initiate a review. Such events may include a change in

statute, key staff changes or a request for review or change.

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Changes: